

CLAIMS

1. A fluid distributor, particularly a hydraulic manipulator, of the type comprising
- 5 - a body (5) having at least one cavity (4), one end (9) of which opens on to at least one face (8) of the body (5),
 - at least one pressure reducing valve (2) which is mounted in the body (5), and which comprises a push rod (11) mounted movably at the level of the open end (9), a plunger (3) mounted in the cavity (4) and a control spring interposed between the push rod and the plunger, the said plunger being mounted so that it can oscillate in translation to carry out the pressure reduction function, and whose equilibrium point depends on the compression of the control spring caused by the depression of the push rod and the output control pressure to be delivered to a downstream device,
 - a control member (6) for modifying the depression of the push rod (11) in order to control the value of the delivered pressure, the control member (6) being mounted pivotably facing the said face (8) of the body (5) and comprising at least one finger (10),
 - means forming a solenoid (15) which can deliver a magnetic field in a direction substantially parallel to the direction of translation of the plunger, which are mounted in the body (5) substantially coaxially with the push rod (3), and which form a bearing surface (17) substantially coplanar with the said face (8) of the body (5),
 - an armature (16), made from a material sensitive to the magnetic field, which can be moved in translation simultaneously with the push rod (11), and which comprises a contact surface (18) located to face the bearing surface (17) of the means forming the solenoid (15), in such a way that it bears on this bearing surface
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to lock the push rod (11) in position with a predetermined attractive force,
characterized in that it additionally comprises means
(20) for fastening the armature (16) to the finger (10),
5 these means delimiting a window into which the finger
projects substantially transversely, in that the push rod
(11) is mounted so that it passes with a clearance into
the armature (16) and projects into the window (21), and
in that the finger (10) is interposed between the
10 fastening means (20) and the push rod (11).

2. The fluid distributor as claimed in claim 1,
characterized in that the fastening means (20) and the
armature (16) jointly delimit the window (21).

3. The fluid distributor as claimed in claim 2,
15 characterized in that the fastening means comprise a
stirrup (25) which forms the upper jamb (26) and the side
walls (27, 28) of the window (21), the lower jamb (29) of
the window (21) being formed by the armature (16).

4. The fluid distributor as claimed in claim 3,
20 characterized in that the finger (10) is in point contact
with the upper jamb (26) of the window (21).

5. The fluid distributor as claimed in claim 4,
characterized in that the finger (10) comprises a
spherical tip (30) on which the upper jamb (29) of the
25 window (21) bears.

6. The fluid distributor as claimed in any one of claims
1 to 5, characterized in that the armature (16) comprises
a washer made from ferrous material.

7. The fluid distributor as claimed in any one of claims
30 3 to 6, characterized in that the stirrup (25) is
overmolded on the washer (16).

8. The fluid distributor as claimed in any one of claims
3 to 6, characterized in that the stirrup (25) and the
armature (16) are made in one piece.

35 9. The fluid distributor as claimed in any one of claims
3 to 6, characterized in that the upper jamb (26) and the

side walls (27, 28) are fixed to the washer (16) by screwing.

10. The fluid distributor as claimed in claim 9,
characterized in that the side walls (27, 28) are spacers
5 (35, 36) through which screws (37, 38) pass.